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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/031,617 | 01/22/2002 | Emmanuel Fleury | Q68144 | 6809 |

23373 7590 09/30/2003

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
WASHINGTON, DC 20037

EXAMINER

MISKA, VIT W

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2841

DATE MAILED: 09/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,617

Applicant(s)

FLEURY ET AL.

Examiner

Vit W. Miska

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 10-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- ☐ Interview Summary (PTO-413) Paper No(s). ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

PRIORITY

1. Applicant's claim for foreign priority based on EP 99115319.8 is acknowledged. A copy of the foreign priority document has been received from the International Bureau. However, the foreign priority document does not appear to correspond to this application. Although there is some common subject matter illustrated in the drawing, at least Figs. 1, 2 and 3 of this application do not appear in the foreign priority document. Consequently, until applicant files a verified translation of the above noted foreign application and shows that in fact this document corresponds to the U.S. filed application, the date of filing of this application for purposes of prior art will be the filing date of WO 01/10064, i.e. 26 November 1999.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent

*protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 10 recites the broad recitation "portable unit" and "communication terminal", and the claim also recites "such as a watch" and "such as a personal computer or PC", respectively, which are the narrower statements of the range/limitation. This claim language is indefinite because it raises doubt as to the scope of the invention claimed, i.e. whether the watch and personal computer are exemplary or whether these are in fact the elements claimed as part of the combination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The claims are rejected, as noted below, assuming the claims are intended to include only the broad range.

3. Claims 10-13, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the PCT published application to Hovind et al (WO 99/55057) in view of the U.S. Patent to Boyd. With reference to claim 1, the Hovind et al reference discloses a communication system between a communication terminal 12 and portable unit 14, the communication terminal including means 42, 48 for transmitting and acoustic signal carrying data, the portable unit including processing means (microcontroller) 20 with a memory (page 5, line 35), receiving and conversion means 26,27,29,32,33 with electro acoustic transducer 23, 29 for receiving the acoustic signals and converting the same for input to the processor means, the receiving means including amplifier 26,32.

4. The Hovind reference does not mention a modulator or demodulator for the acoustic signals transmitted between terminal 12 and portable unit 14. One skilled in the art, however, would be familiar with the manner of transmitting acoustic signals for communication between close range devices. Boyd discloses a system for communicating between a portable unit 12 and communication terminal 10 by means

of acoustic signals. The communication terminal includes a transmitter with modulator 24, amplifier 26 and transducer 28, and the receiver of portable unit 12 includes amplifier 36 and demodulator 38. One skilled in the art having both references would thus have a teaching of modulating and demodulating acoustic signals in a transmitter/receiver arrangement and would thus provide a demodulator in the receiver of portable unit 14 of Hovind to properly receive modulated signals from terminal 12.

5. With respect to claim 11, portable unit 14 further includes conversion and transmission means 22,24,25,28,30,31 for converting and transmitting data supplied by processing means 20, communication terminal 12 further includes processing means 40 and receiving and conversion means 45,46,47,49,52,53 for receiving and converting data transmitted by portable unit 14,

6. With respect to claim 14, a modulation circuit for the transmitter of the conversion and transmission means of portable unit 14 would be a well known and obvious means for shaping the data signals prior to input to transducer 22, 28, as noted above in view of the teachings of Boyd.

7. A piezoelectric transducer is suggested at page 15, line 4ff for the receiving and transmitting means in Hovind et al, as claimed in claim 16.

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8. Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the PCT application to Hovind et al and Boyd as applied to claim 12 above, and further in view of Getman et al. The Getman et al reference teaches the use of the same piezoelectric acoustic transducer as both a transmitter and receiver. One skilled in the art having these references would thus have a suggestion of using the same electro- acoustic transducer as both a receiver and transmitter in the Hovind et al device, as shown in Boyd as an obvious means for reducing the number of components performing similar functions.

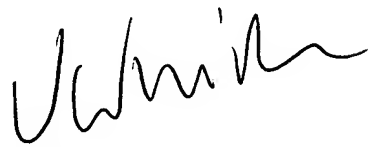
9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over the PCT application to Hovind et al and Boyd as applied to claim 16 above, and further in view of Seiferling. The Seiferling patent discloses a piezoelectric transducer with comparator 20 for comparing the voltage of the received signal from amplifier 16 with a reference voltage from circuit 19. One skilled in the art having the references would thus have a suggestion of providing a comparing means in the receiver of Hovind et al to eliminate noise and other extraneous signals by using a threshold for the received signals.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vit W. Miska whose telephone number is 703-308-3096. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on 703-308-3121. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4900.



Vit Miska
Primary Examiner

VM
9/16/2003